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ABSTRACT

The digest presents the background and reasons for early intervention with children at risk for handicaps. Early intervention is defined, and three primary reasons for intervention are cited: (1) to enhance the child's development, (2) to provide support and assistance to the family, and (3) to maximize the child's and family's benefit to society. Research on the effectiveness of intervention is briefly reviewed, and it is stated that despite research problems, qualitative and quantitative data show that early intervention increases the developmental/educational gains for the child, improves the family's functioning, and provides long-term benefits to society. Long-term cost savings are noted from three research studies. Three factors important in effective intervention are noted: intervention as early as possible; involvement of parents; and programs featuring a high degree of structure, intense services, and an individualized approach. A list of references and resources concludes the digest. (CL)

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DIGEST

THE ARGUMENT FOR EARLY INTERVENTION

What is Early Intervention?

Early intervention means discovering that a child between birth and school age has or is at risk of having a handicapping condition or other special need that may affect his or her development and then providing services to lessen the effects of the condition. Early intervention can be remedial or preventive in nature—remediating existing developmental problems or preventing their occurrance. Early intervention may begin at any time between birth and school age; however, there are many reasons to begin as early as possible.

Why Intervene Early?

There are three primary reasons for intervening early with an exceptional child—to enhance the child's development, to provide support and assistance to the family, and to maximize the child's and family's benefit to society.

Child development research has established that the rate of human learning and development is most rapid in the preschool years. Timing of intervention becomes particularly important when a child runs the risk of missing an opportunity to learn during a state of maximum readiness. If the most "teachable moments" or readiness stages are not taken advantage of, a child may have difficulty learning a particular skill at a later time.

Early intervention services have a significant impact as well for the parents and siblings of an exceptional infant or young child. The family of a young exceptional child often feels disappointment, social isolation, added economic stress, frustration, and helplessness. The compounded stress of the presence of an exceptional child may affect the families' well-being and interfere with the child's development. Families of handicapped children are found to experience increased instances of divorce and suicide, and a handicapped child is more likely to be abused than is a nonhandicapped child. Early intervention for parents results in improved attitudes about themselves and their child, improved information and skills for teaching their child, and more time for both work and leisure. Parents of gifted preschoolers also need early services so that they may better provide the supportive and nourishing environment needed by the child.

A third reason for intervening early is that society will reap maximum benefits. The child's increased developmental and educational gains and decreased dependence upon social institutions, as well as the family's increased ability to cope with the presence of an exceptional child and, perhaps increased ability for employment, provide economic as well as social benefits.

Is Early Intervention Really Effective?

After nearly 50 years of research there is still a great deal to learn. Efforts to document effectiveness have been hindered by experimental design problems associated with: low-incidence handicapping conditions, the diversity of children's problems and the limited scope of available assessment instruments. However, even with these problems, there is evidence—both quantitative (data-based) and qualitative (reports of parents, teachers)—that early intervention increases the developmental educational gains for the child, improves the functioning of the family, and reaps long term benefits to society. Early intervention for handicapped or disadvantaged children has been shown to result in the child's needing fewer special education and other habilitative services later in life, being retained in grade less often, and in some cases, actually being indistinguishable from nonhandicapped classmates years after intervention.

Disadvantaged and gifted preschool-aged children benefit from early intervention as well. Longitudinal data on disadvantaged children who had participated in the Ypsilanti Perry Preschool Project showed that they had made significant gains by age 15 (Schweinhart & Weikart, 1980). These children were more committed to schooling and were doing better in school than children who did not attend preschool. They scored higher on reading, arithmetic, and language achievement tests at all grade levels; showed a 50% reduction in the need for special education services through the end of high school; and showed less anti-social or delinquent behavior outside of school. Karnes (1983) asserts that underachievement in the gifted child may be prevented by early identification and appropriate programming.

Is Early Intervention Cost Effective?

The available data emphasize the *long term* cost effectiveness of early intervention. The highly specialized, comprehensive services necessary to produce the desired developmental gains are often, on a *short term* basis, more costly than traditional school-aged service delivery models. However, there are significant examples of long-term cost savings that result from such early intervention programs.

- A longitudinal study of children who had participated in the Perry Preschool Project (Schweinhart & Weikart, 1980) found that when schools invest about $3,000 for one year of preschool education for a child, they immediately begin to recover their investment through savings in special education services. Benefits included $668 from the mother's released time while the child attended preschool; $3,353 saved by the public schools because children with preschool education had fewer years in special education and were retained for fewer years in grades; and $10,798 in projected life-time earnings for the child.
- Wood (1981) calculated the total cumulative costs to age 18 of special education services to a child beginning intervention at: (a) birth, (b) age two, (c) age 6, and (d) at age 6 with no eventual movement to regular education. She found that the total costs were actually less if begun at birth! Total cost of special services begun at birth was $37,273 and total cost if begun at age 6 was between $46,816 and $53,340. The cost is less the earlier the intervention because of the remediation and prevention of developmental problems which would have required special services later in life.
- A three year follow-up in Tennessee showed that for every dollar spent on early treatment, $7.00 in savings were realized within 36 months. This savings resulted from deferral of special class placement and institutionalization for

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severe behavior disordered children (Snider, Sullivan, & Manning, 1974).

- A recent evaluation of Colorado's statewide early intervention services reports a cost savings of $4.00 for every $1.00 spent within a three-year period (McNulty, Smith, & Soper, 1983).

Are There Critical Factors That Affect the Success of Early Intervention Programs?

While there have been too few attempts to determine critical features of early intervention programs, there are three recurrent factors present in most effective programs. These include the age of the child at the time of intervention, parent involvement, and the intensity and/or the amount of structure of the program model.

1. Many studies report that the earlier the intervention the more effective. With intervention at birth, or as soon after the diagnosis of a disability as possible, the developmental gains are greatest and the likelihood of developing problems later is reduced. (Garland et al., 1981)
2. The involvement of parents in their child's treatment is also important. The data show that parents of both handicapped and gifted preschool children need the support and skills necessary to cope with their child's special needs. (Beckman-Bell, 1981)
3. Highly structured programs appear to be the most successful (White, 1984). That is, maximum benefits are reported in programs that clearly specify and frequently monitor the child's and family's behavioral objectives, precisely identify teacher behaviors and activities that are to be used in each lesson, utilize task analysis procedures, and regularly use child assessment and progress data to modify instruction. In addition to structure, the intensity of the services, particularly for severely disordered children, can significantly affect outcomes (Lovaas, 1982). Finally, individualizing instruction and services to specifically meet the childs' needs also increases a program's effectiveness.

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Resources

Available from The Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091-1589 (703/620-3660).

Early Childhood Education for Handicapped Children: Programs and Curriculum. (100 abstracts). #536. $10.00.

Gallagher, J. J., Scharfman, W., Bristol, M. (1984, Winter). The Division of Responsibilities in Families with Preschool Handicapped and Non-Handicapped Children. *Journal of the Division for Early Childhood, 8*, 3–11. $10.00

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